CLAIMS

1. A motor comprising:

a motor housing;

an armature having a rotating shaft and a commutator, the armature being rotatably supported in the motor housing;

brushes brought into friction contact with the commutator;

brush holders for holding the brushes respectively;

a base plate to which the brush holders are attached; the base plate having a first side and a second side, the second side being opposite to the first side; and

a plurality of electric parts to be mounted on the base plate; the electric parts being allocated to the first side and the second side of the base plate.

2. The motor according to Claim 1, wherein the plurality of electric parts have longitudinal axes respectively and are arranged such that these axes are parallel to the axis of the rotating shaft.

3. The motor according to Claim 1, wherein at least one of the electric parts arranged on the first side of the base plate is oriented such that the longitudinal axis thereof is parallel to the axis of the rotating shaft, whereas at least one of the electric parts arranged on the second side of the base plate is oriented such that the longitudinal axis thereof is parallel to the base plate.

4. The motor according to Claim 1, wherein the base plate is fixed to the motor housing on the central line thereof intersecting perpendicularly to the axis of the rotating shaft, the electric parts being arranged to form symmetry with respect to the central line.

5. The motor according to Claim 1, wherein the electric parts include choke coils and a circuit breaker.

6. The motor according to Claim 5, wherein the circuit breaker has a terminal plate for securing electrical connection, the terminal plate being located adjacent to one of the choke coils and having a heat receiving portion for receiving heat generated in the choke coil.

7. A motor comprising:

a motor housing;

an armature having a rotating shaft and a commutator, the armature being rotatably supported in the motor housing;

brushes brought into friction contact with the commutator;

brush holders for holding the brushes respectively;

a base plate to which the brush holders are attached;

a plurality of electric parts to be mounted on the base plate, the electric parts having longitudinal axes respectively; and

a plurality of part holders for holding the electric parts respectively, the part holders being attached to the base plate with the electric parts being positioned such that the longitudinal axes thereof extend parallel to the axis of the rotating shaft.

8. The motor according to Claim 7, wherein the part holders are removably attached to the base plate.

9. The motor according to Claim 7, wherein the base plate is fixed to the motor housing on the central line thereof intersecting perpendicularly to the axis of the rotating shaft, the electric parts being arranged to form substantially symmetry with respect to the central line of the

base plate.

10. The motor according to Claim 9, wherein the plurality of part holders comprise a first part holder and a second part holder.

11. The motor according to Claim 10, wherein the electric parts comprise three choke coils and a single circuit breaker, the first part holder holding two of the three choke coils, whereas the second part holder holding one of the three choke coils and the single circuit breaker.

12. The motor according to Claim 10, wherein the base plate has a first side and a second side, the first part holder and the second part holder being located on the first side and on the second side of the base plate, respectively.

13. The motor according to Claim 7, wherein each part holder has a holding piece for holding a joint of the electric part held in the holder.

14. The motor according to Claim 7, wherein the motor housing comprises a yoke housing and a gear housing, the yoke housing supporting rotatably the armature, whereas the gear housing containing a decelerating mechanism for decelerating revolution of the rotating shaft and outputting the decelerated revolution.

15. A motor comprising:

a motor housing containing a yoke housing and a gear housing;

an armature having a rotating shaft and a commutator, the armature being rotatably supported in the yoke housing;

a decelerating mechanism for decelerating revolution of the rotating shaft and outputting the decelerated revolution,

the mechanism being located in the gear housing;

a base plate interposed between the yoke housing and the gear housing;

brushes brought into friction contact with the commutator;

brush holders for holding the brushes respectively, which are attached to the base plate; and

a plurality of electric parts to be mounted on the base plate;

the gear housing having a mounting portion for mounting the motor to other apparatuses and a receiving portion for receiving at least a part of the electric part, the receiving portion being located between the rotating shaft and the mounting portion.

16. The motor according to Claim 15, wherein the receiving portion is located within the profile of the yoke housing.

17. The motor according to Claim 15, wherein the decelerating mechanism has an output shaft extended orthogonal to the rotating shaft; the receiving portion being located between the output shaft and the yoke housing along the axis of the rotating shaft.

18. A motor comprising:

a motor housing;

an armature having a rotating shaft and a commutator, the armature being rotatably supported in the motor housing;

brushes brought into friction contact with the commutator;

brush holders for holding the brushes respectively;

a base plate to which the brush holders are attached; the base plate having a first side and a second side; and

a plurality of electric parts to be mounted on the base

plate, the electric parts being allocated to the first side and the second side of the base plate, at least one of the electric parts allocated to the first side and at least one of the electric parts allocated to the second side extend in opposite directions with respect to each other.

19. The motor according to Claim 18, further comprising a first part holder and a second part holder, the first part holder holding at least one of the electric parts allocated to the first side, whereas the second part holder holding at least one of the electric parts allocated to the second side.

20. The motor according to Claim 19, wherein the electric parts held by the first part holder comprise a pair of choke coils, whereas the electric parts held by the second part holder comprise a choke coil and a circuit breaker.

21. The motor according to Claim 18, wherein the electric parts have axes extending parallel to the axis of the rotating shaft, respectively.

22. The motor according to Claim 19, wherein each part holder is provided with a holding piece for holding a joint of the electric part held in the holder.